

Engaged to a Robot? The Role of AI in Service

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Abstract

This article develops a strategic framework for using artificial intelligence (AI) to engage customers for different service benefits. This framework lays out guidelines of how to use different AIs to engage customers based on considerations of nature of service task, service offering, service strategy, and service process. AI develops from mechanical, to thinking, and to feeling. As AI advances to a higher intelligence level, more human service employees and human intelligence (HI) at the intelligence levels lower than that level should be used less. Thus, at the current level of AI development, mechanical service should be performed mostly by mechanical AI, thinking service by both thinking AI and HI, and feeling service mostly by HI. Mechanical AI should be used for standardization when service is routine and transactional, for cost leadership, and mostly at the service delivery stage. Thinking AI should be used for personalization when service is data-rich and utilitarian, for quality leadership, and mostly at the service creation stage. Feeling AI should be used for relationalization when service is relational and high touch, for relationship leadership, and mostly at the service interaction stage. We illustrate various AI applications for the three major AI benefits, providing managerial guidelines for service providers to leverage the advantages of AI as well as future research implications for service researchers to investigate AI in service from modeling, consumer, and policy perspectives.